

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) A process for manufacturing a tire comprising a carcass reinforcement which is radial in the sidewalls and the reinforcement elements of which form with the circumferential direction and radially beneath a crown reinforcement which is composed of at least one layer of radial reinforcement elements forming an angle $\pm \gamma_2$ with said direction, an angle $\mp \beta_2$, the tire also comprising annular bead elements, bead profiled elements, bead filler rubbers, bead reinforcement armatures, crown profiled elements, rubber layers between the carcass reinforcement and the crown reinforcement, and a tread comprising a rubber mix(es) over the crown reinforcement, including initially manufacturing a cylindrical blank comprising all the components of the tire, by at least the following steps:

- a) laying at least one carcass reinforcement ply formed of radial reinforcement elements on the central part of diameter D of a cylindrical building drum;
- b) laying the annular bead elements, which are inextensible and have an internal diameter D_3 , the bead profiled elements and bead filler rubbers, and the bead reinforcement armatures, and turning up the edges of the carcass reinforcement ply to form carcass upturns;
- c) subjecting the central part of said carcass reinforcement ply to an angular variation of its radial reinforcement elements by pre-shaping on

said building drum $[[T]]$, by increasing the diameter D to a greater diameter D_1 , such that said radial reinforcement elements become oblique and form with the circumferential direction an angle $\mp \beta_1$, said angular variation of the carcass reinforcement ply over a width L being effected by means of a sleeve comprising at least one auxiliary shaping ply N of width L_0 , which is formed of textile or metallic elements coated in a vulcanized rubber mix and laid on the building drum T for the cylindrical tire blank;

d) laying the crown profiled elements and rubber layers between the carcass reinforcement and the crown reinforcement, then radially to the outside laying at least one crown ply formed of reinforcement elements oriented relative to the circumferential direction respectively by the angles $\pm \gamma_1$ ($\mp \gamma_1$), γ_1 being such that an angle $\pm \gamma_1$ wherein $|\gamma_1| - |\beta_1| \leq 7^\circ$; and

(e) laying the rubber mix(es) of the tread and shaping the cylindrical blank by bringing the internal diameter D_1 thereof to the internal diameter D_2 of the toric blank of the tire in the vulcanization mold and of the vulcanized tire.

2. (currently amended) A process according to Claim 1, wherein the diameter D_1 is ~~greater than the diameter D of the building drum and is~~ between 0.95 times and 1.3 times the internal diameter D_3 of the annular bead elements.

3. (currently amended) A process according to Claim 1, wherein the angular variation of the radial carcass reinforcement is effected by means of a cylindrical sleeve which is vulcanized and formed of two auxiliary plies N, the reinforcement elements of which form angles equal respectively to 90° and $\pm\alpha$ or $\pm\alpha$ and $90^\circ + \alpha$ with the circumferential direction.

4. (currently amended) A process according to Claim 1, wherein the at least one crown ply laid on the diameter D_1 has a width greater than the a width L_1 of the shaping ply N obtained by increasing the diameter D of the building drum to the greater diameter D_1 .

5. (canceled)

6. (canceled)

7. (new) The process according to claim 1 wherein the at least one crown ply comprises a plurality of crown plies, wherein the reinforcement elements are crossed from one crown ply to the next.

8. (new) The process according to claim 1 wherein the angular variation of the radial carcass reinforcement is effected by means of

a cylindrical sleeve which is vulcanized and formed of two auxiliary plies N, the reinforcement elements of which form angles equal respectively to $-\alpha$ and 90° with the circumferential direction.

9. (new) The process according to claim 1 wherein the angular variation of the radial carcass reinforcement is effected by means of a cylindrical sleeve which is vulcanized and formed of two auxiliary plies N, the reinforcement elements of which form angles equal respectively to $-\alpha$ and 90° with the circumferential direction.

10. (new) The process according to claim 1 wherein angular variation of the radial carcass reinforcement is effected by means of a cylindrical sleeve which is vulcanized and formed of two auxiliary plies N, the reinforcement elements of which form angles equal respectively to 90° and $-\alpha$ with the circumferential direction.